# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/973,762 | 10/11/2001 | Toshiya Shimura | NU-01021 | 7580 |

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YOUNG & THOMPSON
745 SOUTH 23RD STREET 2ND FLOOR
ARLINGTON, VA 22202

| EXAMINER |
|---|
| TAYLOR, BARRY W |

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| 2643 | 11 |

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 12 May 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

<u>PERIOD FOR REPLY</u> [check either a) or b)]

a) ☒ The period for reply expires <u>3 </u>months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☒ The proposed amendment(s) will not be entered because:

    (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);

    (b) ☐ they raise the issue of new matter (see Note below);

    (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

    (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

        NOTE: *See Continuation Sheet*.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *See Continuation Sheet*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☒ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

    The status of the claim(s) is (or will be) as follows:

    Claim(s) allowed: _____.

    Claim(s) objected to: _____.

    Claim(s) rejected: *1-8*.

    Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☒ Note the attached Information Disclosure Statement(s)( PTO-1449) Paper No(s). *7 and 9*.

10. ☐ Other: _____

CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

## Continuation Sheet (PTO-303)

a)    Regarding Applicant's remark on page 7 lines 5-8 wherein Applicant's continue to

argue that Koeman injects a pulse signal into the telephone line and Applicant's only

measures cross talk.  The Examiner notes that Koeman indeed uses receiver to digitize

a response signal to produce a pulse time record that is provided to FFT processor

producing pair-to-pair NEXT loss responses that are supplied to processor for further

processing to produce an estimated power loss which is similar to Applicant's claimed

invention that only focuses on receiving signal, transforming signal, FFT signal and

comparing to known measurements.  The Examiner notes even though Koeman shows

frequencies that include and exceed Applicant's general frequency range does not

necessarily mean that Koeman teaches away.  For example, Koeman figure 2 indeed

shows frequencies of 0 to 100 MHZ, which includes Applicant's frequency range of 0 to

1 MHZ shown in figure 1 but never mentioned in specification.


b)    The Examiner reviewed Applicant's remarks and amendments to independent

claims having newly recited limitations of "only within a frequency range delimited by

xDSL use".  The Examiner is unable to find support in Applicant's specification.  Instead,

the specification simply refer to frequency bands of various xDSL systems partly overlap

each other (see specification page 6, lines 1-2).  Applicant's point to figure 1 for support

for xDSL frequency extending up to 1 MHZ.  However, Applicant's figure 1 is not

labeled.  It appears figure 1 is (db) verses frequency.  Next, the Examiner directs

Applicant's to Koeman figure 2 wherein Koeman figure 2 indeed shows frequencies of 0

to 100 MHZ, which includes Applicant's frequency range of 0 to 1 MHZ shown in figure

1 but never mentioned in specification. Furthermore, Jollota indeed teaches

frequencies well within "xDSL" use (see figure 3). Jollota also compares each

respective noise measurement value with a prescribed threshold indicative of what is

considered to be 'failure' due to excessive crosswalk from another digital

communication service, or as a result of a physical impairment on the line (col. 2 lines

60-64, col. 5 lines 41-60). Jollota discloses since the cable length and loss are known,

the actual noise amplitude for a respective wire line is set equal to the 'adjusted' noise

amplitude multiplied by the cable length and the loss per unit length of the wire line to

accurately and reliably identify the location and amplitude of a source of noise that may

impair digital communications along a wire line telecommunication link (col. 1 lines 7-

13).

Therefore, it would have been obvious for one of ordinary skill in the art at the

time of the invention to modify the invention as taught by Koeman to measure noise at

each cross-connect, subtract noise attributable to the central office and comparing to

known threshold value as taught by Jollota for the benefit determining if there is

excessive crosswalk from another service.


c)    The Examiner is unable to find support in Applicant's specification for the

frequency range recited in dependent claims 2 and 6 "only within a frequency range up

to 1 MHz for xDSL use". In fact, Applicant's specification teaches away from "only"

specific frequencies (see for example specification page 6, lines 1-2 wherein it appears

that "any" frequency that overlap may be used.


d)      Next, Applicant's repeat the same argument that Koeman teaches frequency

ranges outside the newly recited claim limitations for the Jollota reference applied by

Examiner (see page 8 of Applicant's remarks). Applicant's continue to argue and focus

on Koeman first injecting signals but fail to realize that Koeman indeed uses receiver to

digitize a response signal to produce a pulse time record that is provided to FFT

processor producing pair-to-pair NEXT loss responses that are supplied to processor for

further processing to produce an estimated power loss which is similar to Applicant's

claimed invention that only focuses on receiving signal, transforming signal, FFT signal

and comparing to known measurements. The Examiner notes even though Koeman

shows frequencies that include and exceed Applicant's general frequency range does

not necessarily mean that Koeman teaches away. For example, Koeman figure 2

indeed shows frequencies of 0 to 100 MHZ, which includes Applicant's frequency range

of 0 to 1 MHZ shown in figure 1 but never mentioned in specification. Furthermore,

Jollota is clearly within the general range listed by Applicant's (see at least Jollota figure

3). More importantly, Jollota does not depend on inject signal either (see col. 4 lines 45-

48).